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| 10/772,165, | 02/04/2004 | Brad R. Larson | 200314257-1 | 5183 |
| | 7590 05/07/200 CKARD COMPANY | EXAMINER | | |
| | 00, 3404 E. HARMON | QUIETT, CARRAMAH J | | |
| INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Anation No. | Anallanata | | | | |
|---|---|--|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| | 10/772,165 | LARSON, BRAD R. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Carramah J. Quiett | 2622 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was realized to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 04 Fe | ebruary 2004. | | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowar | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-21 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 04 February 2004 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the Ex | e: a) accepted or b) objected or b) objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is object. | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/4/04. | 4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other: | ate | | | | |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS), filed on 02/04/2004, has been placed in the application file, and the information referred to therein has been considered as to the merits.

Claim Objections

2. Claims 7-8 and 17-18 are objected to because of the following informalities:

In each of claims 7-8 and 17-18, "<u>the</u> shadow copy" is claimed without being properly introduced. Did the applicant intend on making claim 7 as well as claim 8 dependent on claim 6 instead of claim 1? Likewise, did the applicant intend on making claims 17 as well as claim 18 dependent on claim 16 instead of claim 11? *Appropriate correction is required*.

For the purpose of prior art rejection, both claims 7 and 8 will be considered as being dependent on claim 6. Similarly, claims 17 and 18 will be considered as being dependent on claim 16.

3. Claim 19 is objected to because of the following informalities: Claim 19 recites the following, "...(6) moving the transparent displayed image across the display in a direction that is opposite to the direction of the subsequent photograph until *it* overlaps..." What is "*it*"? Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 9, 11-15, and 19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson (U.S. Pat. #6,657,667).

For claim 1, Anderson discloses a digital camera system (figs. 1-3) comprising:

a lens (220; col. 3, lines 44-49);

an image sensor (224) for sensing an image viewed by the lens (col. 3, lines 50-56);

a display (402) for displaying the image sensed by the image sensor (col. 4, lines 4-23);

a storage device (350, 354, 356) for storing the image sensed by the image sensor (col. 4, lines 4-36);

processing circuitry (118) coupled to the display, lens, image sensor, and storage device (col. 3, line 26 – col. 4, line 58); and

a processing algorithm that runs on the processing circuitry (col. 4, lines 4-15) that:

provides a user interface (408; col. 5, lines 53-67) for selecting if a composite photograph is to be taken (col. 6, lines 53-61) and for identifying a location of a first photograph to be taken (col. 7, lines 7-35; figs. 7A and 8);

after the first photograph has been taken, overlays indicia on the display indicating an overlapping area within a second photograph that is to be taken (col. 7, lines 31-42; fig. 9); and

moves the overlaid indicia along with the image displayed on the display as the camera is moved to a position to take the second photograph, which overlaid indicia is used to align and place the second photograph relative to the first photograph (col. 7, lines 31-42; fig. 9)

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For claim 2, Anderson discloses the system wherein the algorithm displays a user interface on the display for indicating the size (format) of the desired composite photograph (col. 7, lines 7-18; fig. 8).

For claim 3, Anderson discloses the system wherein the algorithm displays selection buttons (icons) on the display as part of the user interface to select if a composite photograph is to be taken (col. 7, lines 7-18; fig. 8).

For claim 4, Anderson discloses the system wherein the algorithm displays a menu for indicating the size of the desired composite photograph (col. 7, lines 7-18; fig. 8).

For claim 5, Anderson discloses the system wherein the indicia comprises a grid indicating the width and height of the desired composite photograph (col. 7, lines 7-18; fig. 8).

For claim 9, Anderson discloses the system wherein the algorithm stores the location of photographs that are taken; and after the user selects a location of a subsequent photograph, displays indicia adjacent bordering images to guide the user's placement of the next photograph relative to the indicia on the display. Please read col. 7, line 7 – col. 8, line 10 and see figs. 4-14.

Regarding claims 11-15, these claims are method claims corresponding to the apparatus claims 1-5, respectively. Therefore, method claims 11-15 are analyzed and rejected as previously discussed with respect to claims 1-5, respectively.

For **claim 19**, Anderson teaches a method for use with a digital camera having a lens (col. 3, lines 44-49), an image sensor for sensing an image viewed by the lens (col. 3, lines 50-56), a display for displaying the image sensed by the image sensor (col. 4, lines 4-23), a storage device for storing the image sensed by the image sensor (col. 4, lines 4-36), a user interface (col. 5, lines

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53-67), and processing circuitry coupled to the display, lens, image sensor, user interface and storage device (col. 3, line 26 – col. 4, line 58), the method comprising the steps of:

- (1) taking a photograph (col. 7, lines 7-35);
- (2) displaying the photograph on the display (col. 7, lines 7-35);
- (3) using a user interface to select that a composite photograph is to be taken (col. 6, lines 53-61; col. 7, lines 7-35);
- (4) using the user interface to indicate in which direction a subsequent photograph is to be taken (col. 8, lines 1-10);
 - (5) making the displayed image transparent (zones see figs. 6 and 8-10, ref. 440);
- (6) moving the transparent displayed image across the display in a direction that is opposite to the direction of the subsequent photograph until it overlaps a predetermined portion of the subsequent photograph that is to be taken, which overlap is used to align and place the subsequent photograph relative to the photograph (col. 6, lines 36-52; col. 7, lines 7 col. 8, lines 10);
 - (7) taking the subsequent photograph (col. 8, lines 1-10); and
- (8) repeating steps (4) through (7) until all photographs making up the composite photograph are taken (see figs. 7A/B).

For claim 20, Anderson teaches the method further comprising the steps of: using the user interface to select that the composite photograph is complete; and returning the display to normal, nontransparent, operation. Please see figs. 5, ref. 402 and 7A, Steps 566, 568, and 570; and read col. 9, lines 48-59.

For claim 21, Anderson discloses a digital camera system (figs. 1-3) comprising:

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a lens (220; col. 3, lines 44-49);

image sensing means (224) for sensing an image viewed by the lens (col. 3, lines 50-56); display means (402) for displaying the image sensed by the image sensor (col. 4, lines 4-23);

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storage means (350, 354, 356) for storing the image sensed by the image sensor (col. 4, lines 4-36); and

processing means (118) coupled to the display, lens, image sensor, and storage device (col. 3, line 26 – col. 4, line 58) that embodies a processing algorithm (344; col. 4, lines 4-15) that:

provides (408; col. 5, lines 53-67) a user interface for selecting if a composite photograph is to be taken (col. 6, lines 53-61) and for identifying a location of a first photograph to be taken (col. 7, lines 7-35; figs. 7A and 8);

after the first photograph has been taken, overlays indicia on the display indicating an overlapping area within a second photograph that is to be taken (col. 7, lines 31-42; fig. 9); and moves the overlaid indicia along with the image displayed on the display as the camera is moved to a position to take the second photograph, which overlaid indicia is used to align and place the second photograph relative to the first photograph (col. 7, lines 31-42; fig. 9)

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 6-8 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Pat. #6,657,667) in view of Tamayama et al. (U.S. Pat. #6,545,708).

For **claim 6**, Anderson discloses the system wherein the indicia comprises the first photograph (col. 7, lines 7-18; figs. 6 and 8-10). However, Anderson does not expressly disclose that the indicia comprises a shadow copy of the first photograph. In a similar field of endeavor, Tamayama discloses a system wherein the indicia (figs. 5/7, refs. 100-104) comprises a shadow copy of the first photograph (ref. 101-102). Please read Tamayama, col. 6, line 62 – col. 7, line 9 and col. 11, lines 18-25. In light of the teaching of Tamayama, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Anderson with a shadow copy of the first photograph so that the color of the area within the frame is different from that of any other area thereby providing a conspicuous appearance (Tamayama, col. 7, lines 6-9).

For claim 7, Anderson, modified by Tamayama, discloses the system wherein the shadow copy comprises a transparent image (Tamayama, figs. 5/7, refs. 100-104; col. 6, line 62 – col. 7, line 9 and col. 11, lines 18-25.).

For **claim 8**, Anderson, modified by Tamayama, discloses the system wherein the shadow copy comprises a translucent image (Tamayama, figs. 5/7, refs. 100-104; col. 6, line 62 – col. 7, line 9 and col. 11, lines 18-25.).

Regarding claims 16-18, these claims are method claims corresponding to the apparatus claims 6-8, respectively. Therefore, method claims 16-18 are analyzed and rejected as previously discussed with respect to claims 6-8, respectively.

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8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (U.S. Pat. #6,657,667) in view of Dunton (U.S. Pat. #6,304,284).

For claim 10, Anderson teaches that the zones of the LCD can have a zigzag dividing line. However, Anderson does not expressly disclose the system wherein the algorithm guides the user to take photographs in a zigzag fashion. In a similar field of endeavor, Dunton teaches a system where an algorithm (fig. 1B, ref. 166) guides the user to take photographs in a zigzag fashion (see fig. 1B and read col. 4, lines 12-34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the processor of Anderson an algorithm for guiding the user to take photographs in a zigzag fashion in order to provide another procedure for creating a single composite image without gaps between the images (Dunton, col. 1, lines 46-54).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| Uchino et al. (U.S. Pat. 6,813,040) | Imaging system for combining a plurality of partial color images to produce a single whole image. |
|---------------------------------------|---|
| Hofer (U.S. 2004/0189849) | Panoramic sequence guide for guiding user to create a composite panoramic image. |
| Katayama et al. (U.S. Pat. 6,545,708) | An apparatus and method for synthesizing images. |
| Collins (U.S. Pat. 6,262,746) | An image data representing values of transparent and non-transparent pixels. |

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJQ April 17, 2007

SUPERVISORY PATENT EXAMINER